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May 7, 2007

Catherine Witherspoon, Executive Officer
California Air Resources Board
1001 I Street
P.O. Box 2815
Sacramento, CA 95814

RE: Proposed Early Actions to Mitigate Climate Change

Dear Ms. Witherspoon:

On behalf of the DuPont Company, I am pleased to offer the following comments regarding the proposals contained in the April 20, 2007 report: "Proposed Early Actions to Mitigate Climate Change in California."

DuPont is a science company committed to creating sustainable solutions essential to a better, safer, healthier life through innovative in markets ranging from agriculture to transportation to construction. We take climate change seriously, and began reducing greenhouse gas emissions from our operations in 1992. Since then we have increasingly oriented our portfolio of businesses to enable societies around the globe to take on the challenges of sustainability, generally, and climate change in particular. We are a major player in ethanol and the leading candidate as the next generation of biofuels, bio-based butanol; and we are also pioneering in the development of technology for cellulosic conversion. We are a major supplier to the photovoltaic industry, deeply involved in fuel cell technology and a leader in building innovations that enhance sustainability. We are also an industry leader in advancing sustainability from fluorochemicals used in applications such as refrigeration, air conditioning, fire extinguishers and insulation.

In short, we approach engagement with California's efforts to mitigate climate change with a unique combination of commitment and experience. It is in that context that we offer these initial comments on a number of the proposals set forward in the "Proposed Early Actions" report. We realize that these are not yet fully developed. We would welcome an opportunity to meet with your team to discuss these comments and concerns in more depth.

THE LARGER CONTEXT: DuPont is a founding member of a pioneering alliance of major corporations and major environmental NGO's, the US Climate Action Partnership, which has assumed a leading role in shaping national policy on climate change. In conjunction with a number of major companies and the Pew Center on Global Climate Change, Natural Resources Defense Council, Environmental Defense and the World Resources Institute, we have framed a series of recommendations for national action and are in the process of elaborating details of those proposals. We commend these ongoing efforts to your attention, and in particular, urge the present "early action" exercise to attend to the recommendations of this group,

The USCAP recommendations are based upon core principles, which should also apply in California*:*

- Account for the global dimensions of climate change;
- Recognize the importance of technology;
- Be environmentally effective;
- Create economic opportunity and advantage;
- Be fair to sectors, regions, and income groups disproportionately impacted; and
- Recognize and encourage early action.

Successfully addressing global climate change will require concerted, coordinate action at the national and international levels. We believe national action on climate change is nearing. We encourage the ARB to ensure that any policies it adopts will facilitate, rather than impede, California's ability to integrate with a national program.

GENERAL OBSERVATIONS: Three general comments relevant to California "early action" follow from the major recommendations taking shape under USCAP:

Resist pressures to accelerate Group 2 items into regulatory mandates in arenas likely to be incorporated into market mechanisms: DuPont believes that a climate program that relies on market-based mechanisms, such as cap-and-trade, will increase the overall economic efficiency of the program while driving innovation necessary to provide next generation technology solutions. Additional policies and measures, such as automobile or appliance performance standards, are likely to be required (particularly in the near-term) to drive least-cost reductions in all of the major emitting sectors and to avoid disproportionate economic impacts to sectors with few low-cost reduction opportunities. Over time, such performance standards could be phased out as a uniform carbon price emerges in the market, enabling investment capital to flow to least-cost options for real emission reductions. Pressing regulatory mandates too aggressively risks forcing some industries so far down their marginal cost curves that they expend capital inefficiently. Similarly, relying upon such mandates without recourse to a market that can substitute less-costly innovation seriously limits incentives to innovate in non-regulated arenas.

Continue with the emphasis on the Low Carbon Fuel Standard as a key Group 1 priority: The USCAP recommendations anticipate that a range of policies will be required to achieve cost effective GHG reductions from transportation, including reducing vehicle miles traveled, increasing the efficiency of vehicles and reducing the fossil carbon content of transportation fuels. Low carbon alternative fuels and alternative fuel systems are important, and a properly framed LCFS is appropriate for early action priority. Such a performance-based approach has the potential to unleash innovation in creating and bringing to market advanced high performance and low carbon transportation fuels. To displace a significant proportion of the current petroleum fuel pool will require a diversity of biofuels from various feedstocks and production technologies.

Give more explicit attention to encouraging and crediting voluntary early action: To provide incentive for voluntary action prior to a cap and to keep whole those actors who voluntarily reduced in the past we believe credit for early action is critical. Such credit should be predicated on clear demonstration of actions taken to reduce GHG emissions and the resulting reductions, such as engineering records of specific projects. The absence of any formal policy regarding recognition of early voluntary action has the potential to seriously retard such action at the very time when attention to climate change and the need for such action is beginning to sink-in across society. In an environment in which either regulatory mandates or market opportunities are highly probable in the foreseeable future, companies must consider the possibility that early action to realize relatively cost effective opportunities for reductions may not be "creditable" in future regimes, not only denying them use of that "low-hanging fruit," but pushing them further up the marginal cost curve for reductions that may be required in the future. Not only is this not provided for in the current "early action" discussions, but in at least one case (2-10 Fire Supression) you are singling out for severe regulatory control an industry that has been a leader in making major, voluntary GHG emission reductions. This sends precisely the wrong signal to industry.

SPECIFIC COMMENTS – Group 1

1-1 Transportation - Low Carbon Fuel Standard (LCFS): DuPont endorses the approach of establishing performance goals for alternative fuels and developing systematic, science-based metrics for assessing progress toward those goals, including the assessment of lifecycle environmental impact. One of the keys to enabling both continued freedom of goods- and people-movement is reduction in the emissions profile of vehicles. Alternative fuel sources must be part of that long-term picture. The development of alternative fuels is still in its infancy, however, and it is premature to lock-in on any specific fuel options. As noted above we endorse attribute/performance

criteria based incentives for biofuels. While fossil carbon footprint is an appropriate attribute we would also encourage ARB to consider compatibility with existing fuel distribution, dispensing and consumption infrastructure as an important attribute to encourage. Fuels that require significant additional investment in infrastructure and vehicle changes will be difficult to scale up rapidly. Regarding the lifecycle assessment methodology, we do see it as an integral component of the LCFS. However, we urge that priority be given to keeping that methodology relatively simple and workable. Our experience with lifecycle methodologies leaves us concerned that they can quickly become so unwieldy that they can inhibit the decision-making process. This lifecycle assessment would be a candidate for the "80-20 rule" and we suggest the objective be to get a workable process in place and then refine it as we go along. We recognize that development of the LCFS and the lifecycle methodology are just beginning, and we look forward to working with ARB and other State agencies as these proposals take shape.

SPECIFIC COMMENTS – Group 2

2-3 Commercial - Specifications for commercial refrigeration: DuPont supports this initiative, and also supports the actions suggested in the letter of March 5, 2007 from the American Refrigeration Institute to Richard Corey of ARB. Commercial refrigeration is a significant source of refrigerant emissions and there is need for significant improvement. This sector is still heavily reliant on ozone depleting refrigerants, and the highest priority should be policies that encourage the conversion of existing equipment to alternative non-ozone depleting refrigerants (and lower-GWP alternatives) while addressing the problem of leaks.

2-5 Commercial - Reduction of hydrofluorocarbons (HFCs) from foam production/installation including extruded polystyrene and block foam: DuPont supports future regulation of the foam production industry. The foam production industry is in the midst of completing an industry-wide transition away from HCFCs in the 2008-2010 time frame. Regulations should be timed to allow sufficient lead time and transition time to allow materials producers, system suppliers, foam manufacturers and installers to develop and deploy the changes that will be required for this transition. We look forward to working with ARB and other stakeholders to develop appropriate specifications for this segment.

2-6 Education - Guidance/protocols for local governments to facilitate GHG emission reductions and
2-7 Education - Guidance/protocols for businesses to facilitate GHG reductions
DuPont believes education and the diffusion of guidance should continue to be a major point of emphasis in California. The accomplishments of the State in reducing its per-capita energy consumption are in no small part due to integration of education efforts into the programs sponsored by the Energy Commission and, via the regulated utilities, the PUC. There is room for ongoing improvement. This aspect of the challenge cannot be overlooked.

2-10 Fire Suppression - Replacement of high global warming potential (GWP) gases used in fire protection systems with alternate chemical(s): DuPont objects to inclusion of this as an early action item. As suggested above, this industry has been steadily and effectively advancing a code of conduct that has significantly reduced its global warming emissions. It needs also to be noted that the industry's efforts to replace halon fire suppressants with HFCs have resulted in significant reductions in emissions of ozone depleting chemicals. Most importantly, we believe restriction on the use of HFCs will have a significant negative impact for the protection of people, businesses, and valuable assets. There are no non-ODP/non-GWP clean agents for portable fire extinguishers. To our knowledge there currently is only one manufacturer offering only one non-ODP/low GWP agent for total flooding (this action would result in creation of a defacto monopoly). More importantly, the technology in question is relatively new, having been installed only over the past few years. It is not clear that it can replace HFCs in all total flooding uses. The diligence of this industry in voluntarily reducing emissions has resulted in very little GHG-reduction potential from this option. Given that, the uncertainties regarding risk-reduction alternatives in fire suppression and potential exposure of this critical societal service to monopoly control, this item is premature, at best.

2-18 Transportation - Enforce federal ban on HFC release during service/dismantling of MVACs: DuPont supports this action. Industry stewardship efforts encourage responsible use of these refrigerants, and support the federal ban.

2-22 Transportation - Require low GWP refrigerants for new MVACs: DuPont supports this item, but plans must pay careful attention to industry capacity and related issues of timing. Regulations in the EU already require such action over the period 2011-2018. Regulations should include sufficient lead time and transition time to allow component suppliers, auto manufacturers and the service industry to develop and deploy the extensive changes that will be required for this transition.

2-23 Transportation - Add AC leak tightness test and repair to Smog Check 2-23 "Add AC leak tightness test and repair to Smog Check": DuPont supports this action. We view this as consistent with Industry stewardship efforts to encourage responsible use of these refrigerants

We urge your consideration of these comments and look forward to working with you, your staff and the Climate Action Team as the early action process advances. Please don't hesitate to contact us if you have any questions about the above.

Sincerely,

(transmitted via email)

Thomas R. Jacob
Government Affairs Manager, Western Region

cc: C. Shulock, ARB
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